

Please replace Paragraph [0019] with the following paragraph:

[0019] The first interlayer insulating film of this invention is composed of a polymer in which a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the three-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group groups and polymerizable in the two-dimensional direction are three-dimensionally polymerized.

Please replace Paragraph [0021] with the following paragraph:

[0021] In the first interlayer insulating film, the first monomer can be an adamantane derivative having a-four substituted acetylenyl group-groups or a methane derivative having a-two substituted acetylenyl group groups.

Please replace Paragraph [0022] with the following paragraph:

[0022] In the first interlayer insulating film, the second monomer can be an aromatic derivative having a-two substituted cyclopentanonyl groupgroups.

Please replace Paragraph [0023] with the following paragraph:

[0023] The second interlayer insulating film of this invention is composed of a polymer in which a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the two-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group groups and polymerizable in the three-dimensional direction are three-dimensionally polymerized.

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Please replace Paragraph [0025] with the following paragraph:

[0025] In the second interlayer insulating film, the first monomer can be an aromatic derivative having a-four substituted acetylenyl groupgroups.

Please replace Paragraph [0026] with the following paragraph:

[0026] In the second interlayer insulating film, the second monomer can be an adamantane derivative having a-two substituted cyclopentanonyl group-groups or a methane derivative having a-two substituted cyclopentanonyl group groups.

Please replace Paragraph [0027] with the following paragraph:

[0027] The first method for forming an interlayer insulating film of this invention includes the steps of preparing an oligomer by polymerizing, in a liquid phase, a first monomer having a four substituted acetylenyl group groups and polymerizable in the three-dimensional direction and a second monomer having a two substituted cyclopentanonyl group groups and polymerizable in the two-dimensional direction; and causing polymerization after applying the oligomer on a substrate, whereby forming an interlayer insulating film made from a polymer in which the first monomer and the second monomer are three-dimensionally polymerized.

Please replace Paragraph [0029] with the following paragraph:

[0029] The second method for forming an interlayer insulating film of this invention includes the steps of preparing an oligomer by polymerizing, in a gas phase, a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the three-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group-groups and polymerizable in

the two-dimensional direction; and causing polymerization after depositing the oligomer on a substrate, whereby forming an interlayer insulating film made from a polymer in which the first monomer and the second monomer are three-dimensionally polymerized.

Please replace Paragraph [0032] with the following paragraph:

[0032] In the first or second method for forming an interlayer insulating film, the first monomer can be an adamantane derivative having a four substituted acetylenyl group or a methane derivative having a substituted acetylenyl group.

Please replace Paragraph [0033] with the following paragraph:

[0033] In the first or second method for forming an interlayer insulating film, the second monomer can be an aromatic derivative having a-two substituted cyclopentanonyl groupgroups.

Please replace Paragraph [0037] with the following paragraph:

[0037] The third method for forming an interlayer insulating film of this invention includes the steps of preparing an oligomer by polymerizing, in a liquid phase, a first monomer having a four substituted acetylenyl group groups and polymerizable in the two-dimensional direction and a second monomer having a two substituted cyclopentanonyl group groups and polymerizable in the three-dimensional direction; and causing polymerization after applying the oligomer on a substrate, whereby forming an interlayer insulating film made from a polymer in which the first monomer and the second monomer are three-dimensionally polymerized.

Please replace Paragraph [0039] with the following paragraph:

[0039] The fourth method for forming an interlayer insulating film of this invention includes the steps of preparing an oligomer by polymerizing, in a gas phase, a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the two-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group-groups and polymerizable in the three-dimensional direction; and causing polymerization after depositing the oligomer on a substrate, whereby forming an interlayer insulating film made from a polymer in which the first monomer and the second monomer are three-dimensionally polymerized.

### Please replace Paragraph [0042] with the following paragraph:

[0042] In the third or fourth method for forming an interlayer insulating film, the first monomer can be an aromatic derivative having a-four substituted acetylenyl groupgroups.

#### Please replace Paragraph [0043] with the following paragraph:

[0043] In the third or fourth method for forming an interlayer insulating film, the second monomer can be an adamantane derivative having a-two substituted cyclopentanonyl groups or a methane derivative having a-two substituted cyclopentanonyl groups.

## Please replace Paragraph [0047] with the following paragraph:

[0047] The first polymer composition of this invention is composed of a first monomer having a four substituted acetylenyl group-groups and polymerizable in the three-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group-groups and polymerizable in the two-dimensional direction that are three-dimensionally polymerized.

Please replace Paragraph [0049] with the following paragraph:

[0049] In the first polymer composition, the first monomer can be an adamantane derivative having a-four substituted acetylenyl group-groups or a methane derivative having a-four substituted acetylenyl group-groups.

Please replace Paragraph [0050] with the following paragraph:

[0050] In the first polymer composition, the second monomer can be an aromatic derivative having a-two substituted cyclopentanonyl groupgroups.

Please replace Paragraph [0051] with the following paragraph:

[0051] The second polymer composition of this invention is composed of a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the two-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group-groups and polymerizable in the three-dimensional direction that are three-dimensionally polymerized.

Please replace Paragraph [0053] with the following paragraph:

[0053] In the second polymer composition, the first monomer can be an aromatic derivative having a-four substituted acetylenyl groupgroups.

Please replace Paragraph [0054] with the following paragraph:

[0054] In the second polymer composition, the second monomer can be an adamantane derivative having a-two substituted cyclopentanonyl group-groups or a methane derivative having a-two substituted cyclopentanonyl group groups.

Please replace Paragraph [0060] with the following paragraph:

[0060] The interlayer insulating film or the polymer composition of Embodiment 1 is composed of a polymer represented by Chemical Formula 3, in which a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the three-dimensional direction as represented by Chemical Formula 1 and a second monomer having a-two substituted cyclopentanonyl group-groups and polymerizable in the two-dimensional direction as represented by Chemical Formula 2 are three-dimensionally polymerized:

Please replace Paragraph [0062] with the following paragraph:

[0062] The first monomer has the <u>four</u> substituted acetylenyl <u>group groups</u> represented by a general formula, RC≡C— (wherein R is a substituent), and the substituent R may be hydrogen or an aromatic derivative such as benzene, naphthalene, anthracene or biphenyl.

Please replace Paragraph [0063] with the following paragraph:

[0063] Specific examples of the first monomer are an adamantane derivative having a-two substituted acetylenyl groupgroups, such as 1,3,5,7-tetra(acetylenyl)adamantane, and a methane derivative having a-two substituted acetylenyl groupgroups, such as tetra(acetylenyl)methane.

Please replace Paragraph [0064] with the following paragraph:

[0064] The second monomer has the two substituted cyclopentanonyl group groups represented by a general formula, Chemical Formula 4:

Please replace Paragraph [0080] with the following paragraph:

[0080] In contrast, the interlayer insulating film of Embodiment 1 is composed of the polymer composition in which the first monomer having the substituted acetylenyl group-groups and polymerizable in the three-dimensional direction and the second monomer having the substituted cyclopentanonyl group-groups and polymerizable in the two-dimensional direction are three-dimensionally polymerized. Accordingly, the diamond structure having a pore of a molecular size can be realized.

<u>Please replace Paragraph [0083] with the following paragraph:</u>

[0083] The interlayer insulating film or the polymer composition of Embodiment 2 is composed of a polymer represented by Chemical Formula 8, in which a first monomer having a-two substituted acetylenyl group-groups and polymerizable in the two-dimensional direction as represented by Chemical Formula 6 and a second monomer having a-four substituted cyclopentanonyl group-groups and polymerizable in the three-dimensional direction as represented by Chemical Formula 7 are three-dimensionally polymerized:

Please replace Paragraph [0084] with the following paragraph:

[0084] The first monomer has the substituted acetylenyl group-groups represented by a general formula, RC=C— (wherein R is a substituent), and the substituent R may be hydrogen or an aromatic derivative such as benzene, naphthalene, anthracene or biphenyl.

Please replace Paragraph [0086] with the following paragraph:

[0086] The second monomer has the substituted cyclopentanonyl group groups represented by a general formula, Chemical Formula 9:

#### Please replace Paragraph [0102] with the following paragraph:

[0102] In contrast, the interlayer insulating film of Embodiment 2 is composed of the polymer composition in which the first monomer having the <u>four</u> substituted acetylenyl <u>group-groups</u> and polymerizable in the two-dimensional direction and the second monomer having the <u>two</u> substituted cyclopentanonyl <u>group-groups</u> and polymerizable in the three-dimensional direction are three-dimensionally polymerized. Accordingly, the diamond structure having a pore of a molecular size can be realized.

#### Please replace Paragraph [0105] with the following paragraph:

[0105] The interlayer insulating film or the polymer composition of Embodiment 3 is composed of a polymer in which a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the three-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group-groups and polymerizable in the two-dimensional direction are three-dimensionally polymerized in the same manner as in Embodiment 1. Accordingly, the description of the first monomer and the second monomer is omitted in this embodiment.

#### Please replace Paragraph [0121] with the following paragraph:

[0121] The interlayer insulating film or the polymer composition of Embodiment 4 is composed of a polymer in which a first monomer having a-four substituted acetylenyl group-groups and polymerizable in the two-dimensional direction and a second monomer having a-two substituted

cyclopentanonyl group-groups and polymerizable in the three-dimensional direction are three-dimensionally polymerized in the same manner as in Embodiment 2. Accordingly, the description of the first monomer and the second monomer is omitted in this embodiment.

# Please replace the Abstract with the following:

The interlayer insulating film of this invention is composed of a polymer in which a first monomer having a-four substituted acetylenyl group groups and polymerizable in the three-dimensional direction and a second monomer having a-two substituted cyclopentanonyl group groups and polymerizable in the two-dimensional direction are three-dimensionally polymerized.